

Exhibit 2

IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his)
capacity as ATTORNEY GENERAL)
OF THE STATE OF OKLAHOMA and)
OKLAHOMA SECRETARY OF THE)
ENVIRONMENT C. MILES TOLBERT,))
in his capacity as the)
TRUSTEE FOR NATURAL RESOURCES))
FOR THE STATE OF OKLAHOMA,)

Plaintiff,)

vs.)

4:05-CV-00329-TCK-SAJ

TYSON FOODS, INC., et al,)

Defendants.)

- - - - -
THE VIDEOTAPED DEPOSITION OF
VALERIE HARDWOOD, PhD, produced as a witness on
behalf of the Defendants in the above styled and
numbered cause, taken on the 18th day of July, 2008,
in the City of Tulsa, County of Tulsa, State of
Oklahoma, before me, Lisa A. Steinmeyer, a Certified
Shorthand Reporter, duly certified under and by
virtue of the laws of the State of Oklahoma.

TULSA FREELANCE REPORTERS
918-587-2878

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FOR GEORGE'S:	Mr. James Graves Attorney at Law 221 North College Fayetteville, AR 72701
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1 plus or minus that follows it?

2 MR. PAGE: Object to the form.

3 A Right.

4 MR. PAGE: Object to the form.

5 Q Is it an error rate or standard deviation? 11:44AM

6 A It's a standard deviation for multiple
7 samples.

8 Q Okay. Putting that aside, the number I just
9 gave you translates into -- I don't know what it
10 translates into in words. 11:45AM

11 A Billions.

12 MR. PAGE: Object to the form.

13 Q Okay. Billions of gene copies, and if you
14 divide by -- at any rate, it comes out to a number
15 that's many orders of magnitude greater than the 11:45AM
16 number of Enterococci and E. coli that you
17 identified in the litter; correct?

18 A If you divide those numbers, yes.

19 Q Okay, and that -- those ratios strike you as
20 reasonable? 11:45AM

21 A Yeah.

22 Q Do you think that it's likely that if there is
23 a bacterium that no one has ever cultured previously
24 or identified or that is associated with poultry, do
25 you think that it out -- that in poultry feces or in 11:46AM

1 poultry litter would outnumber the indicator
2 bacteria by many orders of magnitude?

3 A So are you talking about Brevibacterium avium
4 there?

5 Q Well, the Brevibacterium that you identified 11:46AM
6 in the litter.

7 A Brevibacterium avium has been cultured from
8 poultry.

9 Q Are you now saying that Brevibacteria that you
10 identified in the litter is Brevibacterium avium? 11:46AM

11 A It's indistinguishable from Brevibacterium
12 avium based on the DNA sequence.

13 Q I thought you testified it was 98 percent
14 consistent?

15 A That's right, and that's indistinguishable. 11:46AM
16 The general rule in molecular biology is 95 to 97
17 percent identity. Greater than that is the same
18 species.

19 Q Brevibacterium avium has been isolated in
20 bubble foot lesions on poultry feet; correct? 11:46AM

21 A Correct.

22 Q It's not been identified in poultry feces?

23 A Correct. There's very little out on the
24 organism.

25 Q Is there any possibility that Brevibacteria is 11:47AM